

SERVICE MANUAL

IDEALair™
COMMERCIAL-GRADE

CG2 Commercial Grade Dehumidifier

SLS Part Number 700899



Contents

1. Precautions
 - 1.1. General Precautions
 - 1.2. Warnings
 - 1.3. Installation Precautions
 - 1.4. Operational Precautions
2. Functions
 - 2.1. Control
 - 2.2. Defrost function
3. Performance curves
4. Specifications
5. Parts Drawings
 - 5.1. Outside component drawing
 - 5.2. Internal component drawing
6. Circuit Diagram
7. Error Codes
8. Troubleshooting Guide
9. Disassembly Instructions
 - 9.1. Disassembly of front housing
 - 9.2. Disassembly of rear housing and wheels
10. Routine Maintenance
 - 10.1. Cleaning the Air Filter
 - 10.2. Replacing the Battery
 - 10.3. Checking wiring connections
 - 10.4. Cleaning evaporator surface
 - 10.5. Checking the refrigerant charge
11. Repair Instructions
 - 11.1. Replacing the water pump
 - 11.2. Replacing the motor
 - 11.3. Replacing the PCB
 - 11.4. Replacing the temperature and humidity sensor
 - 11.5. Replacing the fuse of main PCB
 - 11.6. Re-charging the refrigerant
 - 11.7. Replacing the compressor
 - 11.8. Replacing the Capillary tube
12. Service parts list
13. Warranty

1. PRECAUTIONS

1.1 General Precautions

- To prevent injury to the user, other people, and/or property damage, the instructions should be followed.
- Incorrect operation may cause harm or damage to people and/or property.
- Before servicing this unit you must read this service manual.

1.2 Warnings

- Always check for gas (refrigerant) leakage after installation and/or repair of product. Low refrigerant levels may cause significant product failure. Tip: look for oil drips or oil stains on or near the unit. This indicates a leak in the refrigerant system.
- Securely install the drain hose to ensure that water is properly drained away from the unit.
- To avoid injury, use two or more people to lift and transport the product.
- Operate dehumidifier in an upright position, only. When transporting the dehumidifier on its side, allow the dehumidifier to stand upright for 30 minutes before switching ON. This is necessary to allow the refrigerant system to stabilize and avoid system damage.
- After removing the dehumidifier from its shipping container, visually check for signs of damage. If there is evidence of damage, do not operate. Call the store you purchased the unit from to discuss next steps. Do not discard packing, manuals, or any contents. Original packaging and materials are required for any product return.
- Do not disassemble or repair the product while plugged in.

1.3 Installation Precautions

Please follow these warnings during installation to prevent risk of fire or electrical shock:

- Do not use a defective or underrated electrical circuit.
- For electrical work, consider contacting a qualified electrician, or mechanical technician.
- Always use an electrical plug that is grounded.
- Always install on a dedicated circuit.
- Use the correctly rated breaker, fuse or other over-current protection appropriate to the unit, as specified by local electrical code.
- Do not modify or extend the power cable.
- Be careful when unpacking and installing the product. Sharp edges could cause injury. Be especially careful of the enclosure edges and the fins on the refrigerant coils.
- Do not install the product in a manner that could allow it to fall over. *If this unit falls over, it increases risk of injury or damage.*
- Take care in placing/locating the unit to prevent power cord from being forcefully pulled out or damaged during operation.
- Do not place anything on the power cable. Do not use if the power cable becomes damaged.

1.4 Operational Precautions

Please follow these warnings when operating the dehumidifier to ensure safe and effective operation.

- Do not plug in or unplug the power supply while the unit is operating.
- Do not place a heater or other appliance near the power cable.
- Do not store or use flammable or combustible products near the product.
- If a flammable gas leak occurs, ensure gas is off and open a window for ventilation before turning the product on. *Do not turn switches on or off. There is risk of explosion or fire.*
- If strange sounds, smells, or smoke comes from product, immediately disconnect the power supply.
- Stop operation and close any nearby windows during electrical storms.
- If the unit becomes soaked with water (flooded or submerged), contact Ideal Air Support before using.
- Disconnect power when cleaning or maintaining the product.
- If not using for an extended period of time, disconnect the power supply plug and/or turn off the breaker to the unit.
- Do not block the flow of air at the inlet or the outlet. It may cause product failure and/or unnecessary reduction of useful life.
- To prevent injury, be careful when maintaining or moving the unit as metal edges can be sharp.
- Do not insert hands or other object through air outlet while the product is operating. *There are sharp moving parts inside that could cause personal injury.*
- Do not drink the water drained from the product. It is not sanitary and could cause serious health issues.
- Do not move or tilt the unit while it is operating.
- To avoid water spillage:
 - Do not move the dehumidifier for at least three minutes after turning the power OFF
 - Do not exceed 45 degree angle in transit

2. FUNCTION















2.1. Control panel



Hour counters

Two digital hour counters are built-into the control system.

Function Keys

-  ON/OFF: Press once to turn the unit ON or OFF.
-  PURGE: Press the PURGE key to empty water from the pump reservoir. During normal operation the pump purges automatically when the reservoir is full. Use 'PURGE' before moving the machine to avoid water spillage. The pump will automatically stop after forty seconds of continuous operation.
-  and 
 - 1: Press  and  key to adjust the humidity set-point within the range of 26% and 90%.
 - 1.1. When adjusting the humidity set-point, the unit will not operate until the set-point is lower than the actual humidity reading, and the display will read "completed". The unit will resume operation after the actual humidity reading is higher than the set-point.
 - 1.2. When the set-point is adjusted to below 26%, the unit will run on continuous dehumidify mode. The display will read "CO" for continuous operation.
 - 1.3. In the event of a power loss, the humidity set-point is held in the system memory. The unit will restart once power is restored. If the unit fails to memorize the previous humidity setting, the PCB battery may need to be replaced.
 - 2:  and  keys are used to adjust the time.
 - 3:  and  keys when pressed AT THE SAME TIME will switch menu functions.
-  Press the function key. The panel will display: Humidity setting, Timer, Clock, Language, ID, USB/SD-CARD, and GSM. Press  to select any of these sub menus. Repress  key, the appliance will return to main menu.
-  Press the ENTER key to confirm menu selection.

Note: *The following are **OPTIONAL and non-supported functions:*** Language, ID, USB/SD-CARD, and GSM. Your system may not have these options available. If your system does have these options, it may not function. Please understand these options are not supported by Ideal Air Technical Support and any error message can simply be ignored.

More detailed operational instructions please see the OWNER'S MANUAL

2.2. Defrost Function:

The Ideal Air CG2 Dehumidifier is fitted with a temperature sensitive defrost control. The defrost control device is designed to prevent ice buildup at lower operating temperatures. In some conditions, the defrost device may not be able to remove all ice from the evaporator coil. In these cases, the fan may stop running to shut down air movement to enhance the performance of the defrost mode.

In situations where year round humidity control is desired, the dehumidifier unit will have to operate across a wider range of temperatures. The unit is programmed to restrict defrost operation to the times when ambient temperature falls below 75 degrees F. The defrost control sequence is as follows:

NOTE: T_e = Ambient Temperature.

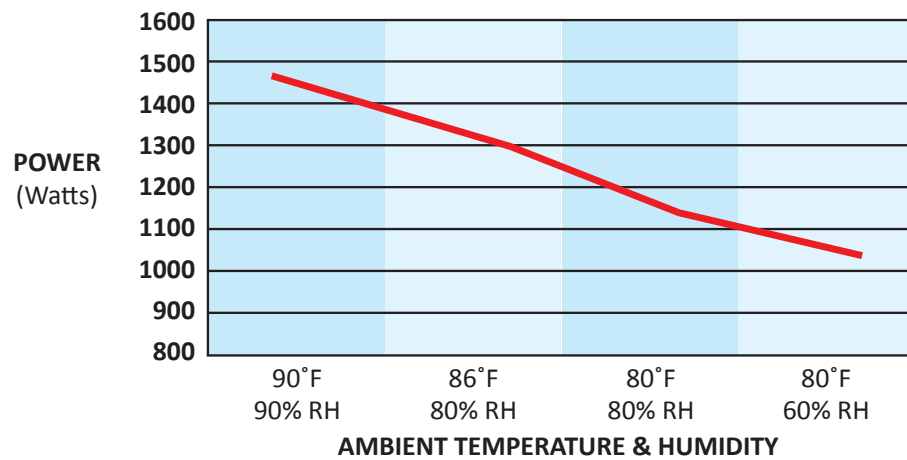
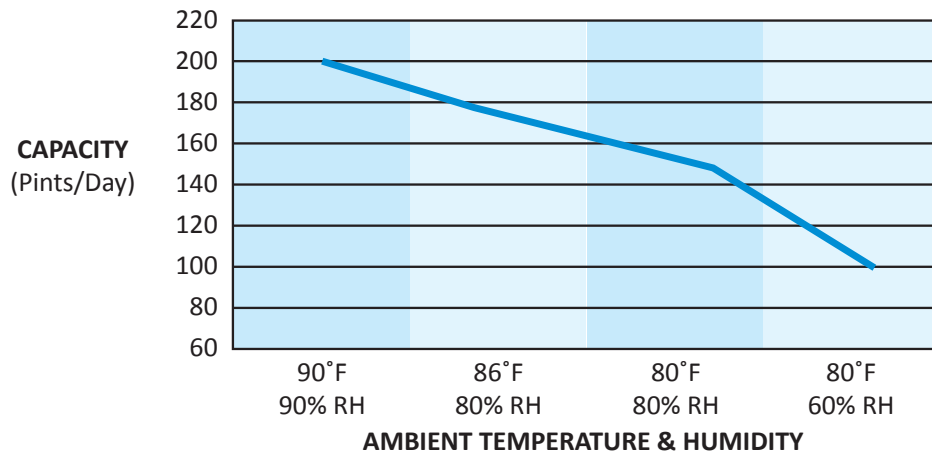
1. When T_e is less than 32°F and greater than 105°F, the compressor and fan motor stop will stop working.
2. When T_e is between 32°F and 75°F:
 - 2.1. Continuous Operation run time is equals to $T_e \times 2$. The minimum run time is 30minutes.
 - 2.2 If temperature of indoor coil is less than or equal to 26°F (with detection continuously for 30 seconds or more) after continuous operation run-time is reached, the unit will automatically enter defrost mode.
 - 2.3 Defrost mode begins with energizing the four-way valve. 30 seconds later the compressor will begin operation. The fan motor will not operate during defrost. The compressor will run for 2min. After this time, the four-way valve will close. 30s later the compressor and fan motor will return to normal operation.
 - 2.4 If temperature of indoor coil is greater than or equal to 26°F, after continuous operation run-time is reached, the unit will not enter defrost mode.
 - 2.5 If $T_e > 75^\circ\text{F}$, the unit will NOT enter defrost mode.

ADDITIONAL WARNINGS RELATING TO REFRIGERATION COMPONENTS:

- Due to the high pressures within the refrigeration circuit, under no circumstances must direct heat be applied to the evaporator coil in an attempt to remove ice buildup.
- No attempt should be made to cut open any part of the refrigeration circuit due to high pressures and the presence of refrigerant gases.
- If power supply is lost to the unit, it must be allowed to stand-by for at least three minutes before restarting. Failure to do so may cause the over-current protection (fuse) to blow due to locked rotor on the compressor.

3. PERFORMANCE CURVES

110-120V/60Hz Performance curves



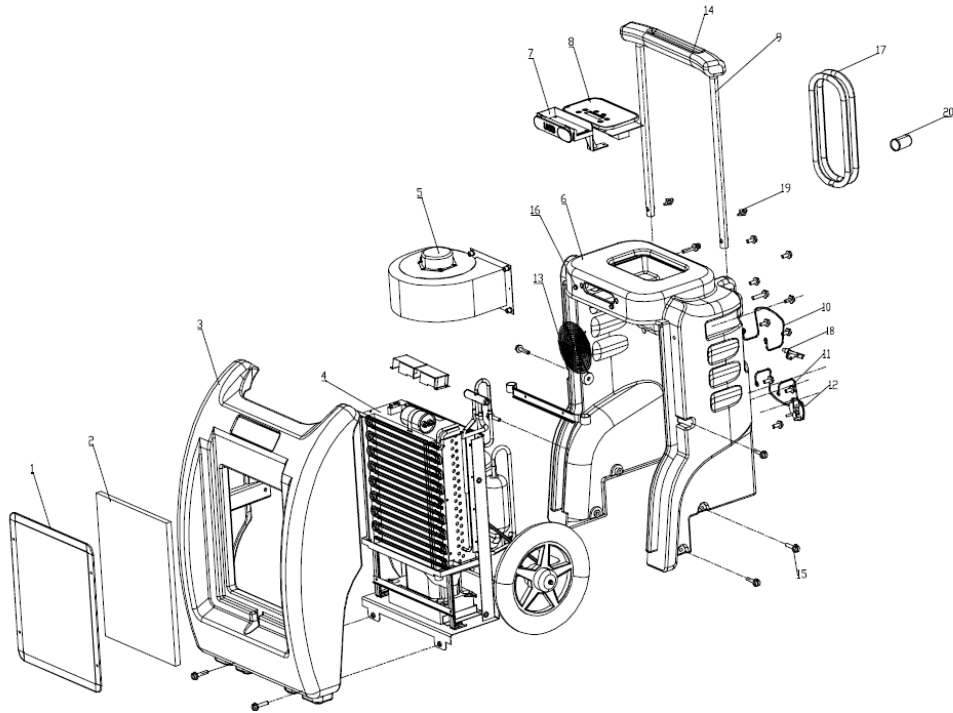
4. SPECIFICATIONS:

Ideal CG2 Dehumidifier @ 110V-120V/60Hz

Dehumidifying Capacity @ 86°F and 80% RH		170 pints/day (80L/day)
Dehumidifying Capacity @ 80°F and 60% RH (AHAM Conditions)		100 pints/day (48L/day)
Rating Power Input / Current (86°F / 80% RH)		1300W/11.5A
Rating Power Input / Current (80°F / 60% RH)		1045W/9.5A
Power Supply:		110V-120V/60Hz
Refrigerant:		R410A/760g
Working Temperature:		41°F~95°F
Controls		Electronic Touchpad
Process Air		306 CFM
Unit Size (inches):		21.3 x 21.3 x 31.9
Packing Size (inches):		22.8x22.8x33.5
Net/Gross Weight:		104lb/115lb
Compressor	Model	TOSHIBA EA103
	Type	ROTARY
	Capacity (BTU)	10130BTU
	Input power(W)	985
	Current (A)	9.22
	Capacitor (uF)	55 uF/250V
	Oil Type	ESTER OIL VG74
	Oil Charge	350ml
Fan motor	Model	YYK-80-4
	Input	80W/0.9A
	Capacitor (uF)	8
	Speed (RPM)	1350

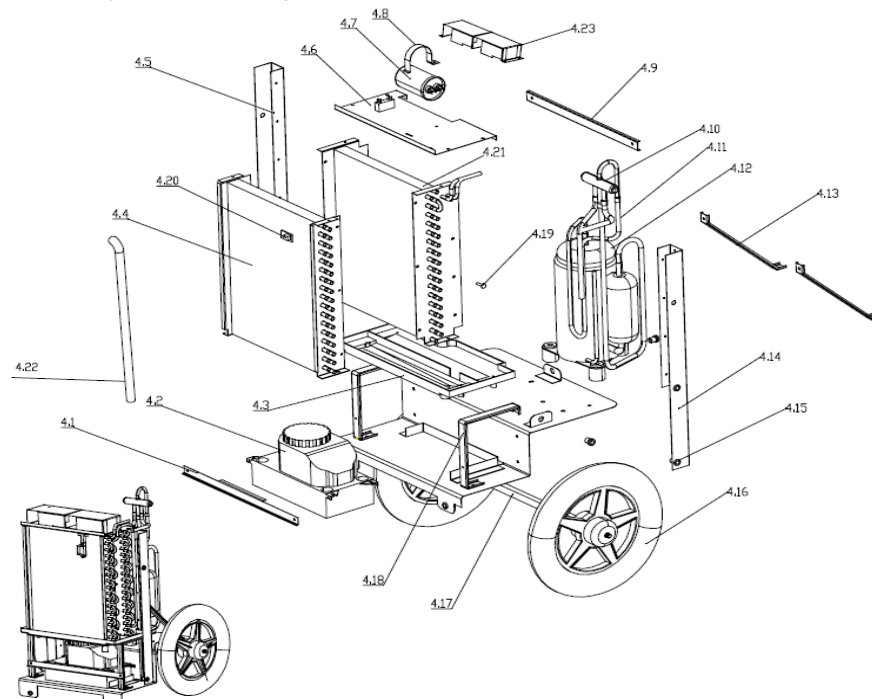
5. PARTS DRAWINGS

5.1. Outside parts drawing



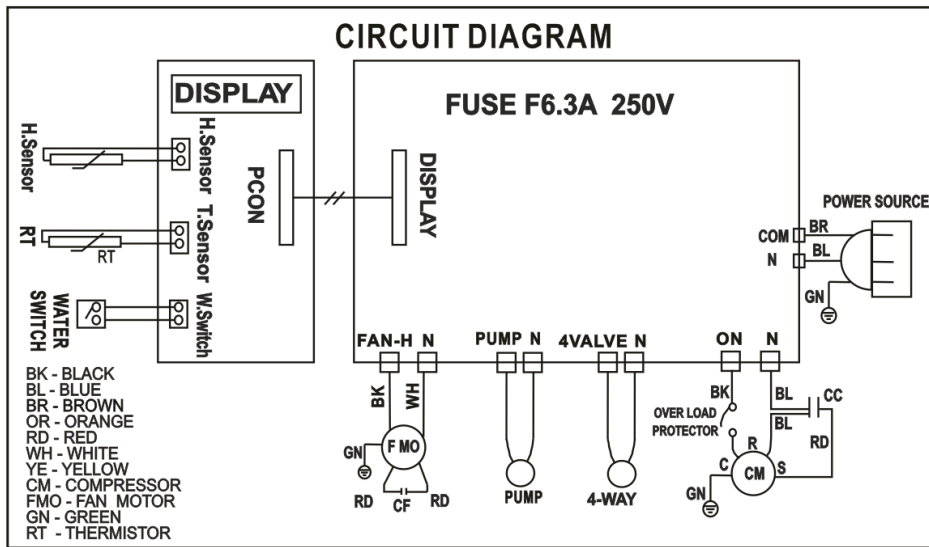
NO	Part Name.	Part Spec.
1	Air intake metal grill	T=1.5 SPCC
2	Activated carbon filter	
3	Front housing	PE Rotational moulding
4	Product internal component	
5	Motor	
6	Back housing	PE Rotational moulding
7	Expansion module component	PCB (Optional Function Part)
8	LCD Display	PCB
9	Pull rod	D20 Stainless steel tube
10	Power cord fixed support	¢4 iron wire
11	M6 outside hex screws	M6*25
12	Power cord Buckle	ABS T=2.0
13	Air outlet metal grill outtake	¢1.5 iron wire
14	Handle	PE Rotational moulding
15	M6 outside hex screws	M6*45
16	USB screw hole cover	silica gel
17	Water pipe II	¢8 L=8M
18	Clamp	301-A
19	Pull rod gasket	T=0.5MM
20	Water pipe connector	

5.2. Internal component drawing



NO.	Part Name.	Part Spec.
4.1	Water pump support frame	Galvanized sheet T=1.0MM
4.2	Water pump	PSB50228
4.3	Water plate	ABS T=2.0MM
4.4	Evaporator	
4.5	Left support frame	Galvanized sheet T=1.5MM
4.6	Upper support frame	Galvanized sheet T=1.0MM
4.7	Compressor capacitor	
4.8	Compressor capacitor support	Galvanized sheet T=0.5MM
4.9	Evaporator and Condenser support	Galvanized sheet T=1.0MM
4.10	Four-way valve	DHF-5(R410A)
4.11	Gas exhaust pipe	T2M ϕ 7 \times 0.7
4.12	Compressor	
4.13	Back support frame	Galvanized sheet T=1.0MM
4.14	Right support frame	Galvanized sheet T=1.5MM
4.15	M6 rivet nut	M6 Galvanized
4.16	Semi-pneumatic Rubber wheel	1200RPB Black D300
4.17	Wheel Connecting rod	Surface galvanized sheet
4.18	Front support frame	Galvanized sheet T=1.0MM
4.19	Screws	ST4*10
4.20	Temperature / humidity sensor	
4.21	Condenser	
4.22	Water pipe I	ϕ 8 L=85mm
4.23	PCB cover	

6. CIRCUIT DIAGRAM



7. ERROR CODES

CODE	ER1	ER2	ER3	ER4
Error message	Coil sensor error.	Humidity sensor error.	Low or no refrigerant.	Water pump fault or blockage.
Display reading	Flashes every 1 second.	Flashes every 1 second.	Flashes every 1 second	Flashes every 1 second.
Reason	The coil sensor's terminals are not securely plugged in.	The humidity sensor's terminals are not securely plugged in.	1. The coil sensor has fallen off 2. Refrigerant leak.	1. Water pump is damaged. 2. Debris in water pump.
Remedy	1. Check to ensure the coil sensor's terminal is securely plugged in. 2. Replace the coil sensor. 3. Replace display panel PCB.	1. Check to ensure the humidity sensor's terminal is securely plugged in. 2. Replace the humidity sensor. 3. Replace display panel PCB.	1. Reinstall coil sensor to the correct position 2. Identify leakage if any, and re-charge the refrigerant. 3. Replace display panel PCB	Replace or clean the water pump.

TROUBLESHOOTING GUIDE

Problem	Possible Causes	Remedy
1. Dehumidifier does not start. (Both compressor and fan motor do not operate.)	No power	Check power supply at outlet.
	The PCB and/or fuse is blown	Check the PCB and fuse, replace as necessary.
	Poor plug contact at outlet	Re-insert plug into outlet or replace outlet.
	Wire disconnected or loose	Look for loose wire and reconnect. Refer to circuit diagram for terminal identification. Repair or replace any loose terminal.
	Capacitor failure. (Discharge capacitor before testing.)	Test capacitor. Replace if not within $\pm 10\%$ of manufacturer's rating. Replace if shorted, open, or damaged.
2. Fan motor runs but compressor does not run	Wiring problem	Check the wire connections; if loose, repair or replace the terminal. If the wires are disconnected, refer to wiring diagram for identification, and replace the wires. Check the wire connections; if not according to the wiring diagram, correct the connections.
	Capacitor (Discharge capacitor before servicing.)	Check the capacitor. Replace if not within $\pm 10\%$ of manufacturer's rating. Replace if shorted, open, or damaged.
	Compressor	Check the compressor for open circuit or ground. If open or grounded, replace the compressor.
	Overload protector (O.L.P.)	Check the compressor O.L.P. if externally mounted. Replace if open. (If the compressor temperature is high, remove O.L.P., cool, and retest.)
3. Dehumidifier does not dry the air as it should.	Room air is dry. Room temperature is too low.	Check room humidity with hygrometer. Increase room temperature. This unit is designed to be operated at temperatures above 41 °F
	Airflow is restricted.	Make sure there are no curtains, blinds or furniture blocking the front or back of the dehumidifier.
	Doors and windows may not be closed tightly	Check all doors, windows and other openings to ensure they are securely closed to prevent moisture from re-entering room.
	Fan motor is not operating.	Check fan motor, repair or replace it.
	Check if the air filter is clogged with dust.	Clean the air filter.

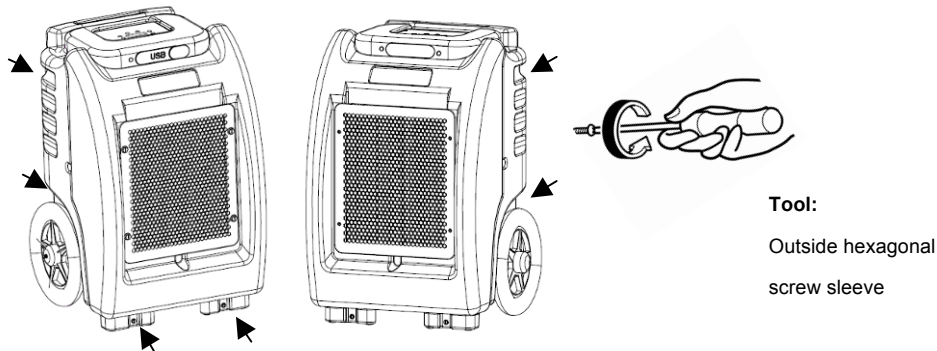
Problem	Possible Causes	Remedy
4. Loud noises during operation	Check if the unit is securely positioned.	Set and use the dehumidifier at a sturdy, flat, and level place.
	Fan	If cracked, out of balance, or partially missing, replace it.
	Internal compressor noise	Replace compressor.
	Loose screws somewhere in the unit	Find loose screws and tighten them.
	Worn bearings in fan motor assembly	If knocking sounds continue when running, or if shaft is loose, replace the motor. If noise continues, or if noise appears to be outside the motor when running, replace motor assembly.
5. Water drips out of unit	Connection may be loose.	Check all water connections and repair as needed.
	Water pump fault or blockage	Check water pump and float switch
	The unit is not installed properly.	The pump basin must be properly positioned by keeping unit upright.
	External water pipe or inside water pipe are loose.	Tighten any loose water connections.
6. Compressor cycles on/off with overload protection.	Poor air circulation.	Move dehumidifier for free and unobstructed air flow.
	Evaporator coils clogged with dust or dirt.	Clean dust or dirt on the evaporator coils
	Fan Motor	If fan is not, determine the cause. Replace if required.
	Short circuit or ground in electrical circuit	Check electrical circuit. Repair as needed.
	Unit pressures not equalized	Allow 2 or 3 minutes rest for pressure to equalize before starting compressor.
	Capacitor	Test the capacitor.
	Wiring	Check the terminals. If loose, repair or replace.
	Refrigeration system	Check the system for a restriction.
	Overload protector (O.L.P.)	Check O.L.P., if externally mounted. Replace if open. (If the compressor temperature is high, remove the O.L.P., cool, and retest.)
7. Ineffective dehumidifying	Check for gas leakage at connecting tube.	Repair gas leak.
8. No time display	PCB Battery low	Replace Battery

9. DISASSEMBLY INSTRUCTIONS

WARNING: Ensure that the power cord to the machine has been disconnected before disassembly

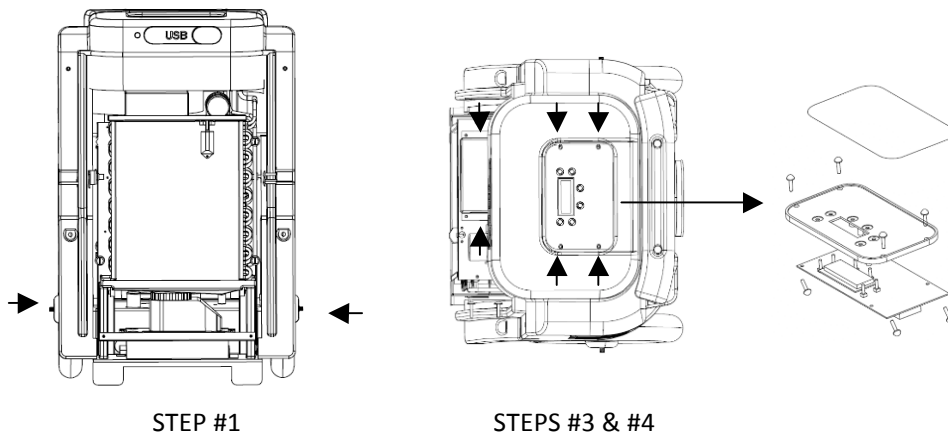
9.1. Disassemble front housing

1. Remove six (6) outside hexagonal screws to take the front housing off of the unit.

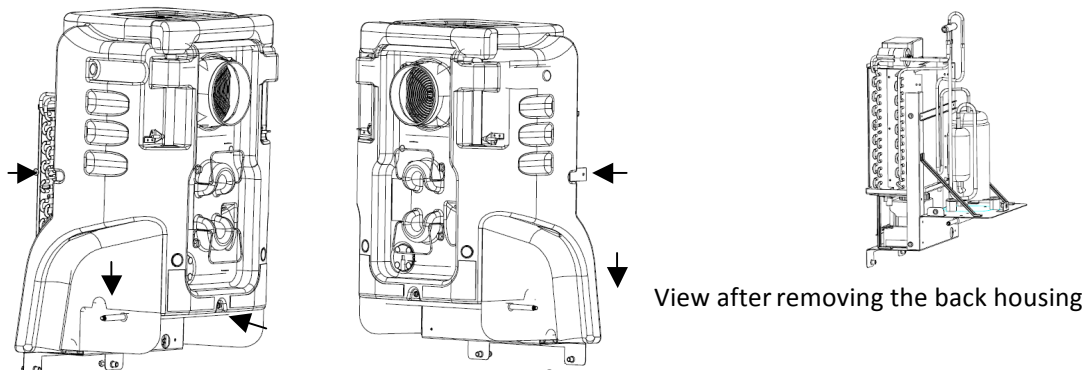


9.2. Disassemble back housing and control panel (see pictures below)

- STEP #1: Remove the nuts from the axel on each wheel hub. Remove wheels from unit.
- STEP #2: Place a support under the unit after removing each wheel to avoid tilting the unit.
- STEP #3: Remove the four (4) screws holding the screen and panel in-place. Remove label.
- STEP #4: Remove two (2) screws attaching to PCB to panel. Pull out lead wire from the PCB.



- STEP #5 (see below): Remove seven (7) screws to remove the back housing from the unit.



10. ROUTINE MAINTENANCE

WARNING: Ensure that the power cord is unplugged from the power outlet before performing routine maintenance.

IMPORTANT: To ensure continued, efficient operation of the dehumidifier, the maintenance procedures below should be performed regularly.

10.1. Frequency of maintenance

The working performance of the dehumidifier will be greatly reduced if the filters become clogged. Please clean the air filter every two months, at minimum. More frequent cleaning may be needed. Use visual inspection weekly to determine if debris build up has clogged the filter.

10.2. Cleaning the air filter.

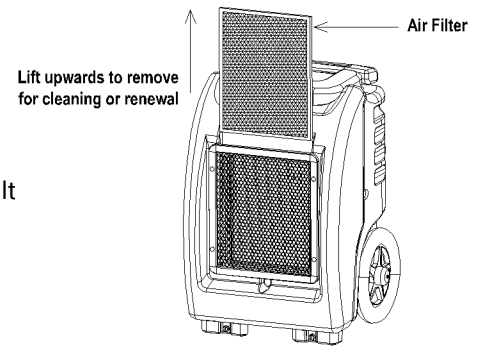
STEP #1: Remove the filter as shown in the diagram below.

STEP #2: Vacuum any debris from the filter.

STEP #3: Use lukewarm water and a mild detergent to wash the filter

STEP #4: drying.

STEP #5: Re-install the filter into the dehumidifier



10.3. Replacing the battery (see images below)

NOTE: Replace the battery every two years, or while time fails to show during operation.

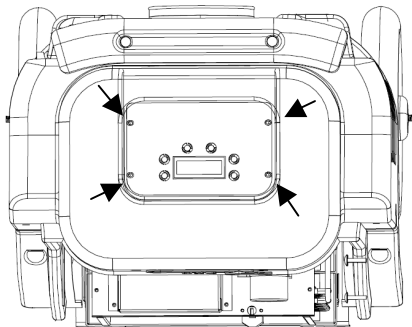
STEP #1: Remove the 4pcs screws in the four corners of the control panel.

STEP #2: Once the screws are removed, carefully remove the control panel to access the PCB.

STEP #3: On the PCB is a CR2032 battery. Remove the battery and replace with new.

STEP #4: Refit the control panel onto the PCB.

STEP #5: Refit the four screws.

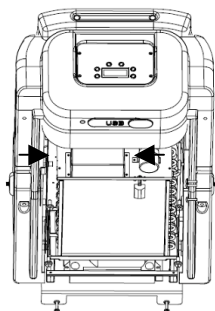


CR2032 battery

10.4. Inspecting wiring connections

STEP #1: Refer to instructions for disassembly of the FRONT housing in section 9.1

STEP #2: Remove two (2) screws to take apart main PCB cover. Check wire connections inside this access panel.



10.5. Cleaning the surface of the evaporator

With the filter removed, inspect the evaporator coils for build-up debris (dust, lint, etc.). If debris is visible, cleaning is needed as follows:

STEP #1: With the Filter removed, remove four (4) screws from the filter cover and set cover aside. Now the evaporator coil will be accessible.

STEP #2: Using a soft brush and a vacuum cleaner, gently clean away the accumulated debris from the evaporator coil.

STEP #3: Re-install the Filter Cover and the Filter.

WARNING: DO NOT STEAM CLEAN REFRIGERATION COILS OR USE HARSH CHEMICALS.

10.6. Check for indication of low refrigerant charge

STEP #1: Disassemble the front housing (refer to section 9.1).

STEP #2: Run the unit for 15 minutes and briefly remove the cover.

STEP #3: Inspect the evaporator coil.

Look for frost evenly coating the evaporator surface—this indicates a normal charge. At temperatures above 68°F, the coil may be covered with droplets of water rather than frost. If partial frosting of condenser and frosting of the thin capillary tubes, is present, this indicates low refrigerant charge. Contact Ideal Air Support for help adding refrigerant gas to the unit.

IN THE EVENT OF LOW REFRIGERANT CHARGE STOP USING THE UNIT TO PREVENT PERMANENT DAMAGE.

11. REPAIR INSTRUCTIONS

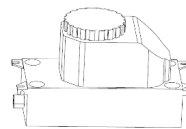
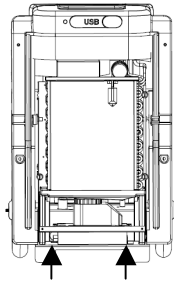
WARNINGS:

In the event of failure of an electrical component, contact Ideal Air Support to obtain the correct replacement part.

Ensure that the power cord to the machine has been disconnected before repairing .

11.1 Replacing the water pump

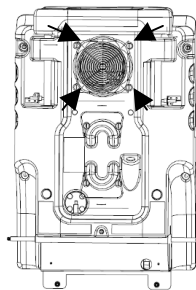
1. If the water pump does not work, please take off the front housing.
2. See the picture below, and remove two (2) screws.
3. Remove drain tubes connected to the water pump.
4. Remove the pump cover, disconnect the pump and water level sensor, and mark the sensor wires to help with proper re-attachment.
5. Replace the new water pump and re-install all wires and tubes.



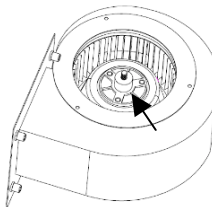
water pump

11.2 Replacing the fan motor

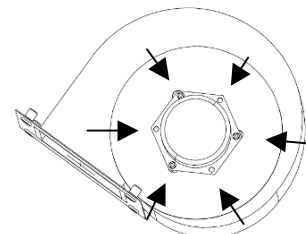
- STEP #1. If the motor is not running, first determine the cause. Replace only if required.
- STEP #2. Please take off the front and back housings.
- STEP #3. As below picture shows, remove four (4) screws to take apart the fan motor from the unit
- STEP #4. Remove one (1) screw to take apart the fan.
- STEP #5. Remove six (6) screws to take apart the motor
- STEP #6. Replace the motor and re-install all items listed above.



Step #3



Step #4



Step #5

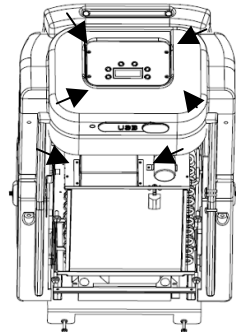
11.3. Replacing the PCB

STEP #1. If the PCB stops working, begin replacement by taking off the front housing and control panel.

STEP #2. See picture below. Remove six (6) screws to take apart main PCB cover. Pull out lead wire of the PCB

STEP #3. Replace the main PCB or display PCB.

STEP #4. Re-install all items above.



11.4 Replacing the temperature and humidity sensors

The Temp/Humidity Sensor may be removed without removal of the PCB or rear cover if you are careful when you disconnect and reconnect the leads from the PCB.

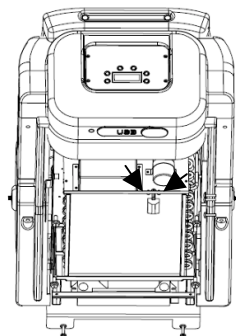
STEP #1. Take off the front housing and control panel.

STEP #2. Remove two (2) screws securing the sensor to the front of the evaporator coils.

STEP #3. Disconnect wire for the temperature and humidity sensors from the PCB.

STEP #4. Replace the temperature and humidity sensor.

STEP #5. Re-install control panel, housing, etc.



11.5 Replacing the fuse of PCB

WARNING: When replacing the fuse, be sure to use only a fuse of the same rating (ampere rating is 6.3A)

STEP #1. Take off the front housing to access fuse and PCB.

STEP #2. Remove two (2) screws to take apart main PCB cover.

STEP #3. Take apart fuse cover and replace fuse.

STEP #4. Replace the fuse of main PCB

STEP #5. Reassemble.

11.6. Re-charging the refrigerant

NOTE: If refrigerant gas is lost from the machine, it may be necessary to use a **Qualified Refrigeration Technician** to correct the problem. Contact **Ideal Air Support** for more information.

STEP #1. Take off the front housing.

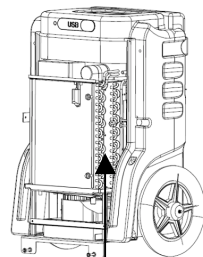
STEP #2. Find the source of the leak and repair using specific refrigerant grade solder.

STEP #3. Locate the pinch-off tubes (see picture below) and solder on service valves.

STEP #4. Connect a vacuum pump, and evacuate refrigerant system for 20 to 30 minutes, until 15Pa~30Pa of vacuum are obtained.

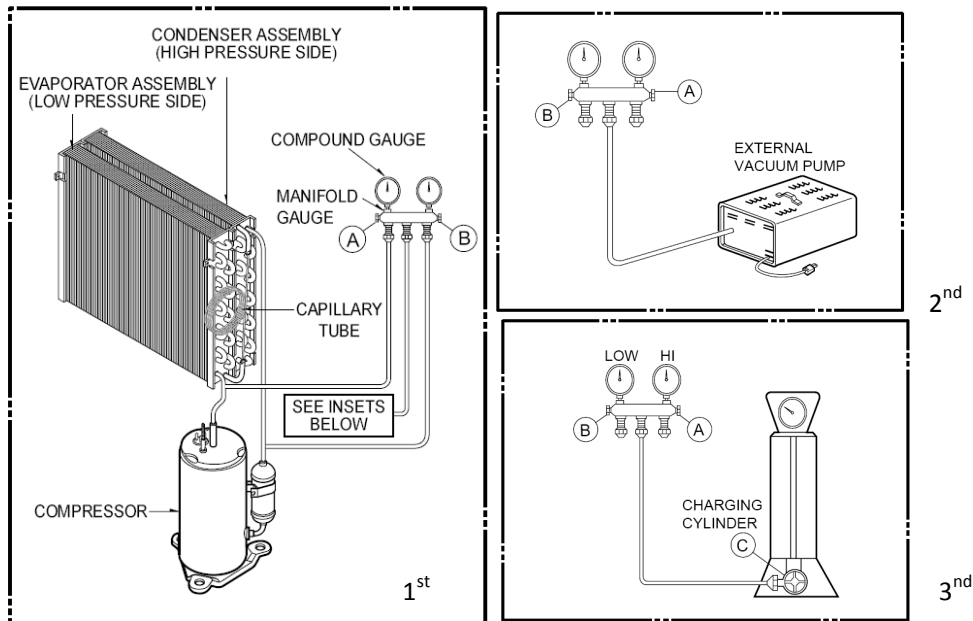
STEP #5. Charge the system with the refrigerant charge listed on the rating label found on the side of the unit.

Step #6. Reassemble.

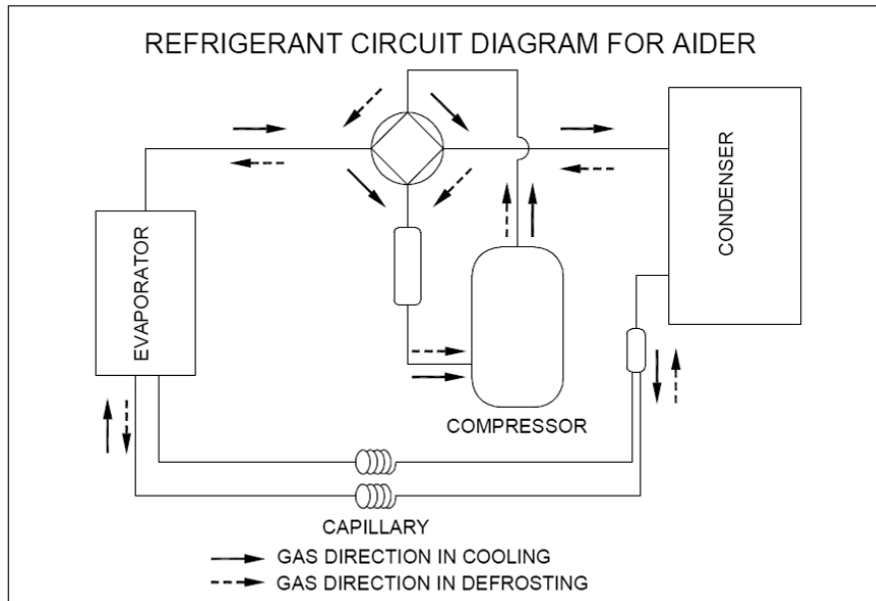


Gas delivery ports

Figure:



Gas circuit diagram:



11.7. Replacing the compressor

The compressor used in the dehumidifier is durable and should last for many years without failure or need for service. In the unlikely event of compressor failure, the compressor can be replaced by competent refrigeration technician.

Failure of the compressor can be confirmed by the following procedure:

1. If the compressor does not run, check that power is reaching the compressor with a volt meter.
2. If power is reaching the compressor, check that the thermal overload switch is functioning properly. Reset as necessary and check for normal operation.
3. Next step is to check the start capacitor.
4. If all of these checks do not identify faulty components, the compressor will need to be replaced. Contact Ideal Air Support for next steps.

11.8. Replacing the capillary tube

When one or both of the capillary expansion tubes is blocked, you will see that only half of the evaporator coils is freezing. Upon closer inspection, you may notice that icing present on one of the capillaries tubes. Failure of the capillary tube can be confirmed by the following procedure (NOTE—an experienced refrigeration technician is required):

1. Take off the capillary tubes and drain out any refrigerant present.
2. Introduce pressurized air into the tube to clean out the capillary tube further. If air does not pass through the capillary tubes, one or both are blocked and need to be replaced.
3. Contact Ideal Air Support for next steps.

12. SERVICE PARTS LIST

Part Number	Description
460598	Compressor capacitor
460600	Motor
460602	Motor capacitor
460604	Main PCB
460606	LCD Display
460608	Temperature and humidity sensor
460610	Water pump
460612	Display film
460614	Wheel
460616	Activated carbon filter
460618	Clamp

13. LIMITED WARRANTY—PARTS ONLY

INCLUSIONS - ITEMS COVERED BY WARRANTY

The following items are covered by the warranty:

1. The period of the warranty on this product is one year, which begins from the day of purchase.
2. To qualify, the owner of the product must provide a copy of the sales receipt showing the date of purchase. In the absence of a sales receipt, Ideal Air will use the date of manufacture which is found on the unit as the start date of the warranty.
3. This warranty is for PARTS ONLY. Ideal Air will help provide technical support to the end-user over-the-phone to help with diagnosis of problems. Ideal Air will provide any needed replacement parts for a period of one year from the date of purchase.
4. This warranty covers defect of materials and components only.

EXCLUSIONS - ITEMS NOT COVERED BY WARRANTY

The following items are not covered by the warranty:

1. End-user dissatisfaction will not be a cause for return under this warranty.
2. Failure to adhere to and/or comply with user's manual instructions will void all associated warranty obligations.
3. Damage that occurs during transportation.
4. Any damage or improper repairs including misuse, negligence, and insufficient maintenance.
5. Damage caused by force majeure.
6. Damage to wheels, which are easily broken by improper usage.
7. Ideal Air will not be responsible for the following for any warranty claim:
 - a. Pickup or delivery of the equipment for repair by Ideal Air or other authorized facility.
 - b. Rental of replacement equipment during any repair period.
 - c. Products which have been declared a total loss and then refurbished and resold
 - d. 3rd party Technician charges including travel time or mileage, labor, and materials.
 - e. This Limited Warranty is for Parts Only. Labor cost is not covered in our warranty.

Notices of Users Responsibilities Regarding the Ideal Air Warranty

1. It is the users' responsibility to maintain the equipment in accordance with the instructions provided in the User's Manual.
2. We recommend that you keep records (pictures & descriptions) and receipts; you may be asked to prove that the maintenance instructions have been followed.
3. It is the user's responsibility to operate the equipment in a safe manner, and for the use in which it was intended.
4. If a defect in materials or workmanship occurs, it is your responsibility to cease operating the equipment until repairs can be made. Damage, which occurs from continued operation, may not be covered by this warranty.